

REMARKS

Upon entry of this amendment, claims 1, 4 and 6-29 are all the claims pending in the application. Claim 29 has been added as a new claim. No new matter has been added. Applicants note that new claim 29 is drawn to the elected invention, and acknowledge that claims 13-24 have been withdrawn from consideration as being drawn to a non-elected invention.

I. Claim Rejections under 35 U.S.C. § 103(a)

Claims 1, 4, 6-12 and 25-28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishikawa (JP 2001-144430) in view of Watanabe (JP 01-198094) and Shimizu (JP 2002-374062).

Claim 1 recites that the non-adhesive region is enclosed by a region, other than the non-adhesive region, of the adhesive region. In the Office Action, the Examiner has recognized that none of the above-noted prior art references disclose or suggest such a feature (see Office Action at page 3).

Nonetheless, in a conclusory manner, the Examiner has asserted that providing such a feature would have been “well within the skill of one in the art” (see Office Action at page 3). In particular, the Examiner has indicated that the “particular design or arrangement of adhesive and non-adhesive regions will be controlled by the particulars of the device being manufactured”, and that such “particulars would be design choices within the skill of one in the art” (see Office Action at page 3). Applicants respectfully disagree with the Examiner’s position.

For example, with respect to the above-noted feature of the non-adhesive region being enclosed by a region of the adhesive region, Applicants note that the specification clearly explains that by providing through holes 116 in a non-adhesive region that is enclosed by a region of the adhesive region, it is possible to prevent the formation of so-called burrs (e.g., see paragraph [0040] of the specification). Thus, contrary to the position of the Examiner, Applicants respectfully submit that the above-noted feature recited in claim 1 is not a matter of mere design choice.

In this regard, Applicants note that the Federal Circuit has held that a claimed invention should not be rejected as a mere "design choice" when the Applicant presents evidence of the technical advantages of the Applicant's structure. *See In re Chu*, 66 F.3d 292, 36 USPQ2d 1089 (Fed. Cir. 1995). Here, as described above, Applicant's disclosure identifies the operational benefits obtained by utilizing a non-adhesive region that is enclosed by a region of the adhesive region, namely, the prevention of the formation of burrs (e.g., see paragraph [0040] of the specification).

Therefore, because the feature of the non-adhesive region being enclosed by a region of the adhesive region confers technical advantages over the prior art, Applicants respectfully submit that such a feature would not have been a simple matter of design choice. In this regard, Applicants note that the Examiner has provided absolutely no factual basis as to why one of ordinary skill in the art would have modified Ishikawa, Watanabe, or Shimizu to provide such a feature.

Moreover, the United States Court of Appeals for the Federal Circuit has expressly

stated that all *per se* rules of obviousness are legally invalid and that the obviousness analysis must be based on the prior art:

The use of per se rules, while undoubtedly less laborious than a searching comparison of the claimed invention--including all its limitations--with the teachings of the prior art, flouts section 103 and the fundamental case law applying it. Per se rules that eliminate the need for fact-specific analysis of claims and prior art may be administratively convenient for PTO examiners and the Board. Indeed, they have been sanctioned by the Board as well. But reliance on per se rules of obviousness is legally incorrect and must cease. Any such administrative convenience is simply inconsistent with section 103, which, according to Graham and its progeny, entitles an applicant to issuance of an otherwise proper patent unless the PTO establishes that the invention as claimed in the application is obvious over cited prior art, based on the specific comparison of that prior art with claim limitations. (Emphasis added)

In re Ochiai, 71 F.3d 1565, 1572, 37 U.S.P.Q.2D (BNA) 1127, 1134 (Fed. Cir. 1995).

In this regard, Applicants note that MPEP 2143 clearly explains that in view of the decision in *KSR International v Teleflex Inc.*, there must be a “clear articulation of the reason(s) why the claimed invention would have been obvious” (emphasis added). Further, MPEP 2143 also indicates that “rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness” (emphasis added).

In the present case, Applicants submit that the above-noted statement by the Examiner indicating that it would have been obvious to modify the cited prior art references to provide a non-adhesive region that is enclosed by a region, other than the non-adhesive region, of the adhesive region, because the “particular design or arrangement of adhesive and non-adhesive regions will be controlled by the particulars of the device being manufactured”, and that such

“particulars would be design choices within the skill of one in the art”, is not a clear articulation of the reason why one of ordinary skill in the art would have modified the cited prior art references in the manner suggested by the Examiner, and is not an articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. Instead, the Examiner’s statement is merely conclusory.

In view of the foregoing, Applicants respectfully submit that the cited prior art references do not disclose, suggest or otherwise render obvious the above-noted feature recited in claim 1 of a non-adhesive region that is enclosed by a region, other than the non-adhesive region, of the adhesive region. Accordingly, Applicants submit that claim 1 is patentable over the cited prior art, an indication of which is kindly requested.

If the Examiner maintains the rejection of claim 1, Applicants respectfully request the Examiner to identify relevant prior art which meets the requirements of the claims instead of mere assertions as to what would have been an obvious design choice.

Furthermore, Applicants note that claim 1 also recites that the base member is provided with through holes penetrating through the non-adhesive region from the first surface of the base member to the second surface of the base member for removing the substrate from the base member. Applicants respectfully submit that the above-noted prior art references do not teach or suggest such a feature.

In the Office Action, the Examiner has taken the position that the through holes 108 of Shimizu correspond to the above-noted “through holes” recited in claim 1, and that such through holes are inherently capable of being used for removing the substrate 10 of Shimizu from the base member 104 (see Office Action at page 3). Applicants respectfully disagree for

the following reasons.

First, Applicants submit that the Examiner has not properly addressed the claim language. In particular, as shown in Fig. 1 of Shimizu, while the through holes 108 are formed in a pallet 104, Applicants note that the adhesive 16 of Shimizu is plainly depicted as covering the entire surface of the region 12 (see Fig. 1). In this regard, Applicants note that paragraph [0032] of Shimizu indicates that the adhesive 16 is sprayed on the entire surface of the region 12 in order to prevent the substrate 10 bonded to the pallet 104 from bending and from separating from the pallet 104.

Thus, in Shimizu, because the adhesive 16 covers the entirety of the region 12, Applicants respectfully submit that the through holes 108 of Shimizu clearly do not penetrate through a non-adhesive region, but instead, penetrate through an adhesive region. In this regard, as noted above, claim 1 plainly indicates that the through holes penetrate through the non-adhesive region.

Moreover, as Shimizu explicitly explains why the adhesive 16 should cover the entirety of the region 12 (i.e., to prevent bending of the substrate 10 and to prevent the substrate 10 from separating from the pallet 104), Applicants respectfully submit that it would not have been obvious to one of ordinary skill in the art to modify Shimizu such that the through holes 108 penetrate through a non-adhesive region.

Second, Applicants respectfully submit that the Examiner's position that the through holes 108 can be used to remove the substrate 10 from the base member 104 is incorrect. In particular, as shown in Fig. 1 of Shimizu, the through holes 108 of the base member 104 align with the through holes 18 of the substrate. In particular, as is evident from Fig. 1 of Shimizu,

and as explained in paragraphs [0028] and [0029] of Shimizu, the pins 114 pass through both of the through holes 108 and the through holes 18.

Thus, because the through holes 108 of the base member 104 and the through holes 18 of the base member are aligned with one another such that the pins 114 pass through both of the through holes 108 and 18 (i.e., the through holes 108 and 18 are used for positioning purposes), Applicants respectfully submit that the through holes 108 are not capable of being used for removing the substrate 10 from the base member 104.

In this regard, Applicants note that in contrast to the alignment of through holes 108 and 18 shown in Shimizu, as explained in connection with an illustrative embodiment of the present invention, “the through holes 116 allow removal pins 251 to penetrate through the flexible-substrate support jig 101 so as to push up an FPC 150 from a back side 150b of the FPC 150 when peeling the FPC 150 off the flexible-substrate support jig 101” (see paragraph [0041]).

In view of the foregoing, Applicants respectfully submit that the cited prior art references do not disclose, suggest or otherwise render obvious the above-noted feature recited in claim 1 of the base member being provided with through holes penetrating through the non-adhesive region from the first surface of the base member to the second surface of the base member for removing the substrate from the base member.

If the Examiner disagrees with Applicants’ comments above, and believes that the through holes 108 of Shimizu are inherently capable of being used for removing the substrate 10 from the base member 104, Applicants request that the Examiner provide a basis in fact and/or technical reasoning to support such a position as required by MPEP § 2112 (IV).

Based on the foregoing, Applicants submit that claim 1 is patentable over the cited prior art, an indication of which is kindly requested. Claims 4, 6-12 and 25-28, as well as new claim 29, depend from claim 1 and are therefore considered patentable at least by virtue of their dependency.

Regarding non-elected claims 13-24, Applicants note that each of independent claims 13, 23 and 24 includes all of the above-noted features recited in claim 1. Accordingly, as these claims include all of the features recited in claim 1, upon allowance of claim 1, Applicants submit that claims 13, 23 and 24 should be rejoined in accordance with MPEP § 821.04 and indicated as allowable, along with all claims that depend from claims 13, 23 and 24.

II. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited.

If any points remain in issue which the Examiner feels may best be resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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